



Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 12187 (1987): Specification for coffers [MED 24:
Security Equipment]

“ज्ञान से एक नये भारत का निर्माण”

Satyanaaranay Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartṛhari—Nītiśatakam

“Knowledge is such a treasure which cannot be stolen”



BLANK PAGE



PROTECTED BY COPYRIGHT

Indian Standard
SPECIFICATION FOR COFFERS

- 1. Scope** — Covers the dimensional, material and security requirement of coffers.
- 2. Size and Dimensions** — The size, shape and leading dimensions of coffers shall be as given in Fig. 1 to 4.

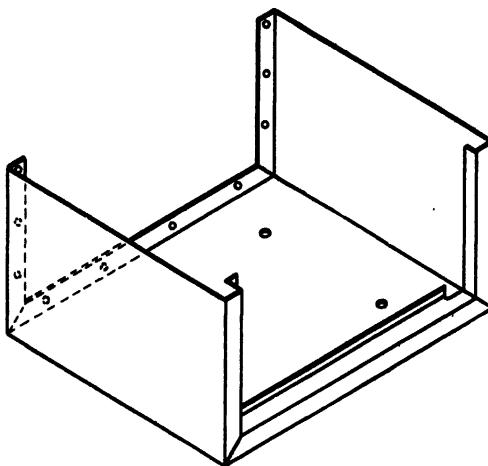


FIG. 1 SECTIONAL PERSPECTIVE OF BODY SHOWING BEND CONSTRUCTION

Sales Sectional Committee, EDC 22 [Ref : Doc : EDC 22 (4615)]

- 2.1** The length, width and height shall not be more than 380 mm and capacity shall not be more than 27 litres.
- 3. Material** — The different parts of coffers (see 4 and 5) shall be manufactured from materials specified in Table 1.

Note — Keeping in view the availability of the indigenous material and testing facilities with the manufacturers, some physical methods of tests have been given in Appendix A.

4. Construction and Workmanship

- 4.1 Fabrication** — The coffers shall be well made and free from defects. Workmanship shall be good. The body, cover and main bolt of the lock shall be free from blow holes, castings and other surface defects. Surfaces of the bolts which are to be in sliding contact shall be finished smooth and true.
- 4.2 Body** — The body shall be bent out of a single mild steel plate to the shape illustrated in Fig. 1 which shows sectional perspective of the body. The plate shall be bent uniformly by pressure and not by hammer blows. The recess at front which receives the door shall be deep enough to allow the door in closed position to remain 10 to 12 mm below the front edge of the body. All the eight corners, as also the single joint of the body shall be strongly welded and filed smooth. The corner joints shall be welded both from inside as well as outside. Suitable holes shall be provided at the bottom for fixing holdfasts so as to grout the coffer into the wall or for fixing it to the storewell shelf or table top.

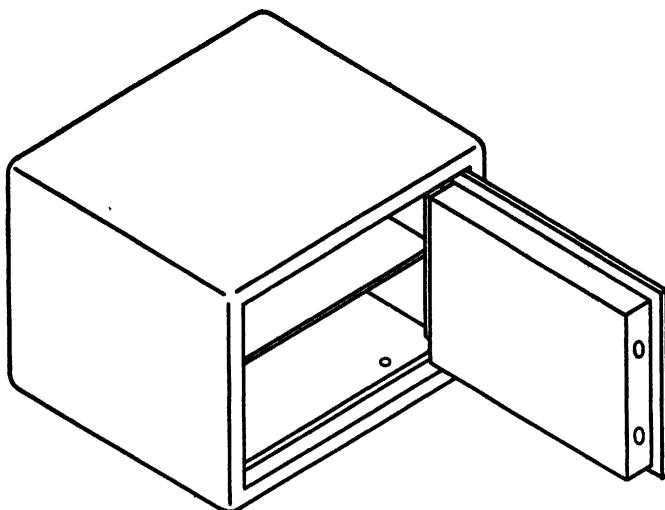


FIG. 2 COFFER (WITH DOOR OPEN)

4.3 Back — The back shall be inserted from inside and plug welded to the rear flanges of the body and filed smooth.

4.4 Door — The door shall be of mild steel with three edges machine (front, top and bottom) and shall fit snugly into the recess formed by the body flanges. The back edge of the door shall be reinforced with a square mild steel bar 16 mm square which also acts as a rigid support for the pivot pins, and the clearance at any place between the door and the body shall not be more than 0.5 mm. When locked, the door shall not have a play of more than 0.5 mm in the direction in which the door opens.

4.5 Door Fittings

4.5.1 Hinges — Hinges shall be of the pin pivot type and shall be made of mild steel. The pivots shall be accurately machined and fitted so as to allow the door to move without appreciable friction or play. They shall not be accessible from the outside. The pivot pins shall not be less than 8 mm of dia.

4.5.2 Bolts — Bolts shall be of mild steel polish bar. There shall be two bolts for locking the door, the boltwork shall be mounted on a secure base which shall also guide the bolts during sliding. The base shall be solidly welded to the door plate. The bolts shall slide smoothly when the handle is turned and fit snugly behind jamb of the body. The cross sectional area of each shooting bolt shall be 290 sq mm.

4.5.3 Handle — The handle when made of cast brass or die-cast alloy shall be nickel plated or chromium plated or anodized. Handles may also be made of aluminium as per IS : 617-1975 'Specification for aluminium and aluminium alloy Ingots and castings for general engineering purposes (second revision)'.

4.6 Lock — The coffer shall be fitted with a high quality lock. The general arrangement of the lock shall be as shown in Fig. 4. The lock shall be protected by a drill-resisting plate fitted, with the base of the boltwork, in front of the lock as shown in Fig. 3.

4.6.1 Dimensions and tolerances of the lock

4.6.1.1 The leading dimensions of the lock and its components and tolerances thereon shall be those agreed to between the purchaser and the supplier.

**AMENDMENT NO. 1 MARCH 2002
TO
IS 12187 : 1987 SPECIFICATION FOR COFFERS**

(*Page 5, Table I, Sl No. 1, col 3*) — Substitute the following for the existing matter:

Mild steel conforming to IS 1079:1994 'Hot rolled carbon steel sheets and strips (*fifth revision*)'.¹

or

Mild steel conforming to IS 2062:1992 'Steel for general structural purposes (*fourth revision*)'.

or

Mild steel conforming to IS 5988:1992 'Hot rolled steel plates, sheets, strips and flats for flanging and forming operation – Specification (*first revision*)'.

(ME 24)

Reprography Unit, BIS, New Delhi, India

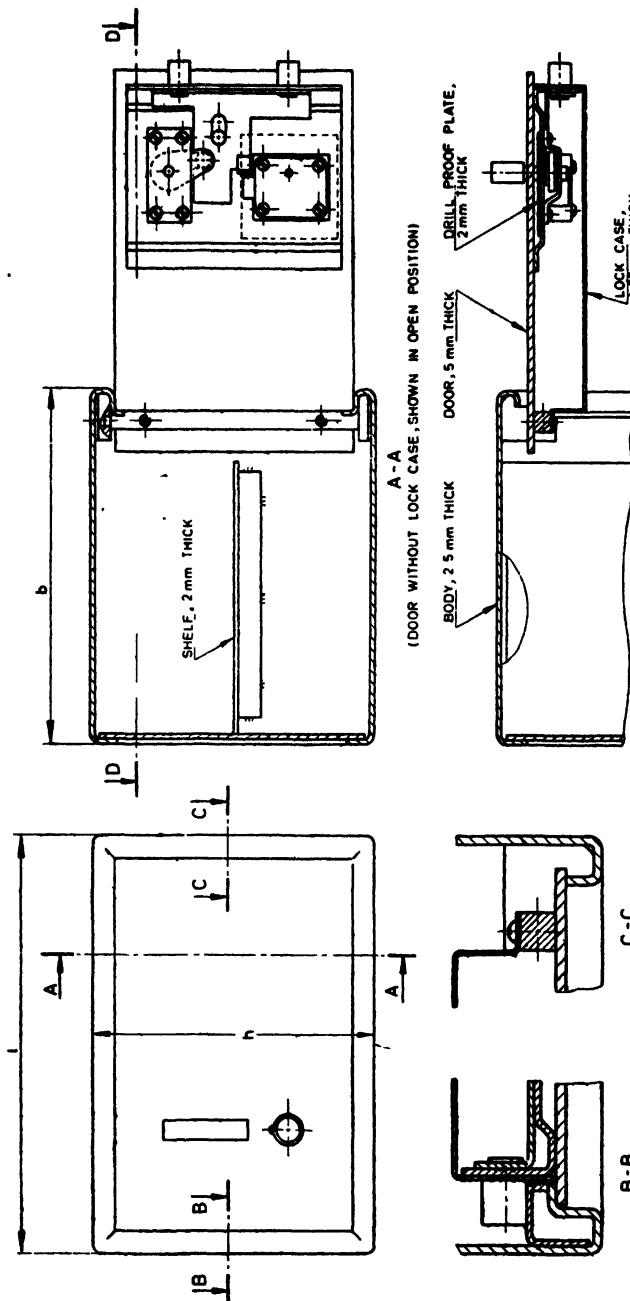


FIG. 3 DETAILS OF COFFER

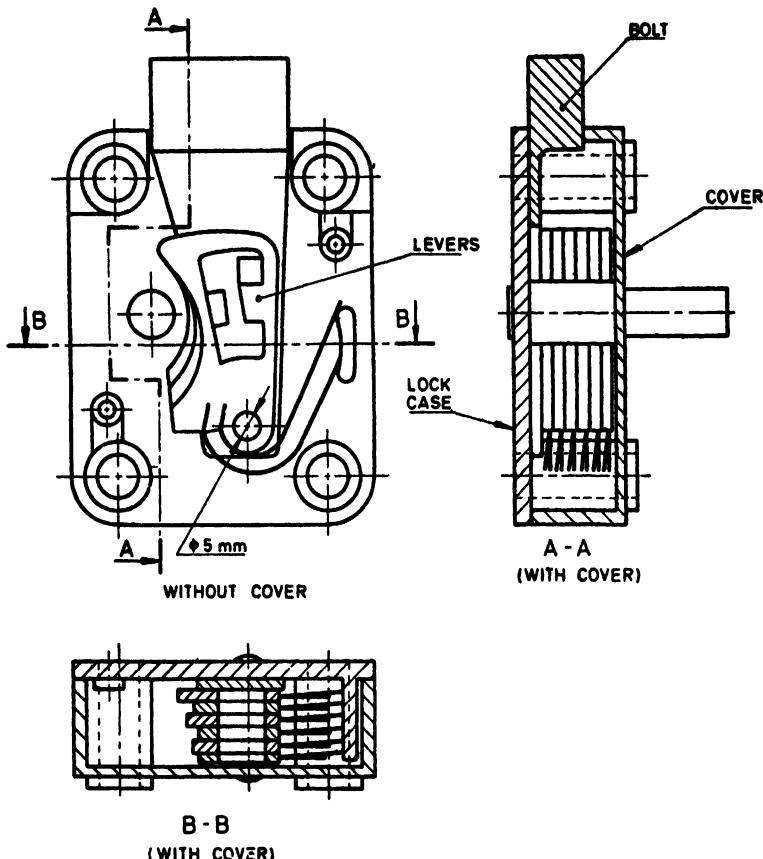


FIG. 4 LOCK

4.6.1.2 General arrangement — The general arrangement of a typical lock shall be as shown in Fig. 4.

4.6.1.3 Fabrication — The body, cover and the bolts of the lock shall be free from blow-holes, casting and other surface defects. The surface of the body and of the bolt, which are to be in sliding contact shall be finished smooth and true. The case of the body shall be provided with at least four clearing holes for fixing bolts of size M6.

4.6.2 Levers — The lock shall be fitted with at least six levers. The levers may not be of uniform thickness but shall be smooth on both faces so as to obtain parallelism. The levers shall be machine-punched and shall not be less than 1.6 mm thick. The slots in the levers shall be accurately cut so as to minimize friction in their working. In case of dual control lock, each lever shall have two slots for the passage of main and auxiliary bolts pins.

4.6.2.1 False (dummy) levers shall not be used.

4.6.2.2 Lever springs — Each lever shall be fitted with two phosphor bronze springs with their ends securely lodged into the slots cut in the lever. After fitting the spring, the slots shall be peened over at both sides. The springs shall be uniformly curved and shall be free from dents or scratches. When the levers are fitted into the lock, each spring shall rest against the back of the main body so that the spring is kept under tension. The springs fitted into the levers shall stand the test given under 4.6.2.3.

6.1.3 The enamel used for undercoating and finishing shall conform to IS : 2932-1974 'Specification for enamel, synthetic, exterior (a) undercoating, (b) finishing (*first revision*)'.

7. Marking

7.1 Marking on Coffers — A metal plate showing the manufacturer's name or trade-mark shall be affixed to the coffers.

7.2 Standard Marking — Details available with the Bureau of Indian Standards.

7.3 Marking on Keys — The keys shall bear an identification number which shall not be the same as the serial number of the coffer.

8. Inspection — The purchaser or his authorized representative shall have free access to the manufacturer's works at all reasonable time to inspect coffers at various stages of manufacture.

9. Packing

9.1 Each coffer shall be packed in accordance with the best trade practice with its door shut but not locked. The keys shall be separately sealed in a cardboard or metal box and placed inside the coffer. The keys may also be packed and despatched separately or delivered in some other manner if the purchaser so desires.

A P P E N D I X A

(Note under Clause 3)

REQUIREMENTS FOR MATERIALS OF DIFFERENT PARTS OF COFFER AND THEIR LOCKS CONFORMING TO INDIAN STANDARDS AND METHODS OF TEST

Serial No.	Material	Typical Examples	Requirements for Materials
1.	Mild steel	Grade Fe 410-S of IS : 226-1975 (<i>fifth revision</i>)	Finished components shall satisfy the following bend test: The component part when cold shall withstand without developing cracks being doubled over either by pressure or by blows from hammer until the internal radius is equal to the thickness of the component part.
2.	Cast brass	Grade 3 of IS : 292-1983	Copper content shall be not less than 60 percent. Casting shall be free from blow holes, surface and other casting defects.
3.	Brass sheet	CuZn 40 of IS : 410-1977	The brass sheet shall meet the same bend test as specified for mild steel.
4.	Brass wire	IS : 2704-1983 'Specification for brass wire for cold-headed and machined parts (<i>first revision</i>)'	Copper content shall not be less than 55 percent and tensile strength 350 MPa, Min.
5.	Phosphor bronze wire	Grade I of IS : 7608-1975	The wire used for spring shall comply with the test given below: The lever spring shall be fitted into the lever as specified under 4.6.2.2 and shall be pressed down so as to touch the top edge of the lever and released. This shall be repeated six times. At the end of the test the spring shall regain its original position.

E X P L A N A T O R Y N O T E

Coffers are used to keep small amounts of valuables. They may be portable or may be fitted in a cupboard or fixed in a wall.

The standard gives the details of construction and materials of coffers.